

Cont  
21

between the electrical element in chip 13 connected to connector 11 and the electrical device connected to pin 35.

---

IN THE CLAIMS:

Please replace claim 1 with the following:

---

Q2  
--1. (Amended) A connector chip for electrically connecting a conductive contact pin thereto, comprising:

a nonconducting top layer;

a nonconducting bottom layer;

a conductive sheet situated between the top layer and the bottom layer; and

a passageway extending at least partially through the chip, the passageway including means for holding the pin in contact with the sheet and for restraining the pin from translating with respect to the chip.--

[ Please replace claim 2 with the following: ]

--2. (Amended) The electrical connector chip as defined in Claim 1 wherein:

the holding means includes means for applying a frictional force against the pin, whereby a withdrawal of the pin from the passageway is resisted.--

[ Please replace claim 3 with the following: ]

--3. (Amended) The electrical connector chip as defined in Claim 2 wherein:

the pin has a lateral side; and

the holding means includes means for applying a normal force against the side, whereby the frictional force is generated when a force is applied to the pin in a direction that would, in the absence of the frictional force, withdraw the pin from the passageway.--

Cont  
Q2  
Please replace claim 4 with the following:

--4. (Amended) The electrical connector chip as defined in Claim 2 wherein:

the passageway includes an opening through the sheet; and

the opening has a breadth that increases when the pin is inserted therethrough.--

Please replace claim 5 with the following:

--5. (Amended) The electrical connector chip as defined in Claim 4 wherein:

the passageway is further comprised of a top hole through the top layer, and a bottom hole through the bottom layer; and

the top hole, the bottom hole and the opening are aligned.--

Please replace claim 6 with the following:

--6. (Amended) The electrical connector chip as defined in Claim 5 wherein:

the opening, when unstressed, has an unstressed minimum breadth;

the pin is cylindrical and has a diameter;

the unstressed minimum breadth is smaller than the diameter of the pin;

the opening has a periphery; and

the sheet is comprised of a flexible material so that the periphery can deflect into the bottom hole when the pin is inserted into the opening.--

*Cont  
A2*

Please replace claim 7 with the following:

--7. (Amended) The electrical connector chip as defined in Claim 5 wherein the sheet is composed of a flexible material so that the breadth varies responsive to the contact pin being inserted therethrough.--

Please replace claim 8 with the following:

--8. (Amended) The electrical connector chip as defined in Claim 7 wherein:

the breadth varies between an unstressed minimum breadth and a stressed breadth, with the stressed breadth being greater than the unstressed minimum breadth;

the contact pin has a diameter greater than the unstressed minimum breadth; and

the breadth increases to the stressed breadth in response to the contact pin being inserted into the opening.--

Please replace claim 9 with the following:

--9. (Amended) The electrical connector chip as defined in Claim 8 wherein the opening is formed by a plurality of fingers extending centripetally from a section of the sheet that circumscribes the opening.--

Please replace claim 10 with the following:

--10. (Amended) The electrical connector chip as defined in Claim 8 wherein:

the top hole has a top hole diameter and the bottom hole has a bottom hole diameter;

and

the top hole diameter is smaller than the bottom hole diameter.--

*Cont*  
*Q2*  
[Please replace claim 11 with the following:]

--11. (Amended) The electrical connector chip as defined in Claim 1 comprising means for preventing rotation of the pin with respect to the chip.--

[Please replace claim 12 with the following:]

--12. (Amended) The electrical connector chip as defined in Claim 1 further comprising:

a plurality of passageways through the chip; and

a harness including a plurality of the pins spatially arranged so that each of the pins can be simultaneously aligned with one of the passageways, respectively, whereby

all of the pins can be simultaneously inserted into passageways, respectively, and

the harness is prevented from translating or rotating relative to the chip by the holding means when the contact pins are respectively inserted into the passageways.--

[Please replace claim 13 with the following:]

--13. (Amended) The electrical connector chip as defined in Claim 12 wherein:

each holding means is electrically isolated from the other holding means and is electrically connected to a respective chip element, whereby

each chip element is electrically connected to a respective contact pin when the contact pins are respectively inserted into the passageways.--

Cont  
A2

Please replace claim 14 with the following:

--14. (Amended) The electrical connector chip as defined in Claim 1 wherein:

the chip is from 0.5 to 2.0 millimeters thick; and

the sheet is from 0.05 to 0.2 millimeters thick.--

Please replace claim 15 with the following:

--15. (Amended) A connector chip for electrically connecting a conductive contact pin thereto, comprising:

a nonconducting top layer;

a nonconducting bottom layer;

an electrical element; and

a conductive sheet situated between the top layer and the bottom layer, and being electrically connected to the element;

the top layer having a top hole therethrough, and the bottom layer having a bottom hole therethrough, with the top hole and the bottom hole being in alignment and comprising an aligned hole pair;

the sheet having an opening aligned with the aligned hole pair; and

the opening including means for holding the pin in contact with the sheet when the pin is inserted into the opening, whereby

the pin is prevented from translating with respect to the chip and an electrical connection between the pin and the element is established and maintained.--

amt  
A2

Please replace claim 16 with the following:

- 16. (Amended) The electrical connector chip as defined in Claim 15 wherein:
- the chip is from 0.5 to 2.0 millimeters thick; and
- the sheet is from 0.05 to 0.2 millimeters thick.--

Please replace claim 17 with the following:

- 17. (Amended) The electrical connector chip as defined in Claim 15 comprising:
- a plurality of the aligned hole pairs and openings; and
- a harness including a plurality of the pins spatially arranged so that each of the contact pins can be simultaneously aligned with one of the aligned hole pairs and openings, whereby
- each of the contact pins can be simultaneously inserted into one of the aligned hole pairs and openings, respectively, and
- the harness is held stationary relative to the chip by the holding means when the pins are inserted.--

Please add new claim 23:

- 23
- 23. (New) A connector of a chip of a type having a passageway extending at least partially therethrough, for electrically connecting a conductive contact pin to the chip, the connector comprising:

Cont  
A3

a conductive sheet having a peripheral portion connected to the chip adjacent the passageway, and means extending from the peripheral portion into the passageway for holding a pin in contact with the sheet and for restraining the pin from translating with respect to the chip.--

Please add new claim 24:

--24. (New) The electrical connector as defined in Claim 23 wherein:

the holding means includes means for applying a frictional force against the pin, whereby a withdrawal of the pin from the passageway is resisted.--

Please add new claim 25:

--25. (New) The electrical connector as defined in Claim 24 wherein:

the pin has a lateral side; and

the holding means includes means for applying a normal force against the side, whereby the frictional force is generated when a force is applied to the pin in a direction that would, in the absence of the frictional force, withdraw the pin from the passageway.--

Please add new claim 26:

--26. (New) The electrical connector as defined in Claim 24 wherein:

the holding means includes an opening through the sheet; and

the opening has a breadth that increases when the pin is inserted therethrough.--

Cont  
a3  
Please add new claim 27:

--27. (New) The electrical connector as defined in Claim 26 wherein:

the opening, when unstressed, has an unstressed minimum breadth;

the pin is cylindrical and has a diameter;

the unstressed minimum breadth is smaller than the diameter of the pin;

the opening has a periphery; and

the sheet is comprised of a flexible material so that the periphery can deflect into the bottom hole when the pin is inserted into the opening.--

Please add new claim 28:

--28. (New) The electrical connector as defined in Claim 26 wherein the sheet is composed of a flexible material so that the breadth varies responsive to the contact pin being inserted therethrough.--

Please add new claim 29:

--29. (New) The electrical connector as defined in Claim 28 wherein:

the breadth varies between an unstressed minimum breath and a stressed breath, with the stressed breath being greater than the unstressed minimum breath;

the contact pin has a diameter greater than the unstressed minimum breadth; and

the breadth increases to the stressed breadth in response to the contact pin being inserted into the opening.--



*Cont  
A3*  
[Please add new claim 30:]

--30. (New) The electrical connector as defined in Claim 29 wherein the opening is formed by a plurality of fingers extending centripetally from a section of the sheet that circumscribes the opening.--

[Please add new claim 31:]

--31. (New) The electrical connector as defined in Claim 23 comprising means for preventing rotation of the pin with respect to the chip.--

[Please add new claim 32:]

--32. (New) The electrical connector as defined in Claim 23 wherein:  
  
the sheet is from 0.05 to 0.2 millimeters thick.--

---